

REMARKS

This responds to the Office Action dated 3 November 2008. Claims 1, 7, 13, 21, 24, 30, and 31 are amended above. Claim 23 has been canceled and the limitations of that claim added to claim 21. No new matter has been added. Claims 1-18, 21, 22, and 24-31 remain pending in the application.

Claim Rejections – 35 U.S.C. § 112

Claims 1-6 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claim 1 is amended above to recite “the second needle” and is now definite.

Claim Rejections – 35 U.S.C. § 102

Claims 1, 3-7, 11-18 and 21-29 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,136,010 to Modesitt et al. Applicant respectfully traverses this rejection.

Claim 1 recites “the snare comprising a loop portion configured to grasp the suture.” Claim 7 recites “the snare including a loop portion; ...the loop portion of the snare also being configured to receive the suture and needle combination and to grasp the suture in the blood vessel and retract the suture through the wall of the blood vessel.” Claim 13 recites “the snare comprising a loop portion; ...positioning the needle with the suture inside the loop portion of the snare; [and] grasping the suture with the loop portion of the snare. Claim 21 recites “a snare comprising a loop portion; wherein the vascular closure device is configured to pass the suture and the needle through a wall of the blood vessel and into the loop portion, the loop portion of

the snare being configured to grasp the suture at a location spaced from the free end [of the suture] and retract the suture through the wall of the blood vessel.” Claim 24 recites “the snare comprising a loop portion; positioning the needle and the suture within the loop portion of the snare; grasping the suture with the loop portion of the snare and withdrawing the suture through the wall of the blood vessel.” The loop portion allows the suture to be grasped effectively, perhaps with the suture doubling back onto itself to create a strong hold on the suture to complete the particular procedure.

Modesitt discloses vessel closure probe 70 with reference to at least Figures 11A-D that does not include a loop portion used to grasp the suture. Rather, the Modesitt vessel closure probe 70 includes a short length of suture 74 that spans between a pair of needle receptacles 52. The length of suture 74 and needle receptacles 52 are fixed to the articulatable foot (anchor) 24 that is positioned within the vessel. A free end 76 of suture 34 is advanced with a hollow needle 38' until the end 76 is positioned in one of the receptacles 52 and connected to one end of the short length of suture 74. A second hollow needle 38 is advanced to the foot 24 without a suture and coupled in the opposite needle receptacle 52 thereby connecting to an opposite end of the short length of suture 74. The needle 38' is then retracted proximally while the end 76 of suture 34 maintains connection with the suture 74. The needle 38 is also retracted proximally to pull the sutures 34, 74 proximally and eventually into connection with an opposing end 82 of the suture 34 as shown in Figures 11D and 11E.

Thus, it is the distal end of the empty needle 38 that attaches to the suture length 74 to draw the suture lengths 34, 74 proximally after the suture lengths 34, 74 have been coupled together. Therefore, Modesitt clearly fails to disclose or suggest at least those limitations of

claims 1, 7, 13, 21 and 24 recited above relating to the claimed “snare comprising a loop portion.”

Further to the above, Modesitt fails to disclose or suggest “a suture configured to move with the first needle from the retracted position to the extended position,” and “a snare configured to move with the second needle from the retracted position to the extended position.” Only the end 76 of the suture 34 moves with the needle 38’ in Modesitt, and no device (*i.e.*, a snare or loop portion) moves from the retracted position to the extended position with the needle 38. Therefore, Claim 1 is allowable for this additional reason.

Furthermore, claim 21 has been amended to recite that “the loop portion of the snare [is] configured to grasp the suture at a location spaced from the free end and retract the suture through the wall of the blood vessel . . .” Modesitt does not teach or suggest this limitation. Therefore, claim 21 should be allowable for this additional reason.

Dependent claims 3-6, 11, 12, 14-18, 22, 23, and 25-29 are allowable for at least the reason they depend from one of allowable claims 1, 7, 13, 21 and 24.

Claim Rejections – 35 U.S.C. § 103

Claims 1 and 2 stand rejected under 35 U.S.C. Section 103(a) as being unpatentable over U.S. Patent No. 5,562,688 to Riza in view of U.S. Patent No. 5,330,488 to Goldrath, and further in view of U.S. Patent No. 5,562,684 to Kammerer. Applicant respectfully traverses this rejection.

As noted above, claim 1 recites both “a suture configured to move with the first needle from the retracted position to the extended position,” as well as a “snare configured to move with

the second needle from the retracted position to the extended position, the snare including a loop portion configured to grasp the suture.” In each of Riza, Goldrath and Kammerer, one or both of the suture and snare features (as identified by the Examiner) are advanced through the needles after the needles have been positioned in the extended position. Alternatively, at least some of the references disclose using a single needle for use with both the suture and snare. For example, Riza discloses, with reference to Figure 5 in the description at column 7, lines 37-57, that the introducer needle 82 is first inserted into the recess 68 along with the first end 85 of the suture 81, and then later inserted through the recess 69 with the wire loop 84. In Goldrath, the snare 32 is passed into the surgical site through a previously placed trocar 30. A suture material 20 is threaded through the needle 40 and guided by an angled guide of the open end of the needle for grasping by the snare 32 (*see* column 5, lines 20-32 of Goldrath). Kammerer fails to disclose every feature of claim 1 for similar reasons. Therefore, Applicant submits that Riza, alone or in combination with Goldrath and Kammerer, fails to disclose, suggest, or render obvious every limitation of claim 1, and the claims that depend from it.

Claims 7-10 stand rejected under 35 U.S.C. Section 103(a) as being unpatentable over U.S. Patent No. 5,728,144 to Evans et al. Applicant respectfully traverses this rejection.

Claim 7 recites “an anchor configured to extend through an opening in a blood vessel, ...a snare configured to be inserted through a wall of the blood vessel at a location that is adjacent to the opening in the blood vessel, ...[and] a suture and needle combination configured to be inserted through the wall of the blood vessel at a location that is adjacent to the opening, the loop portion of the snare also being configured to receive the suture needle combination and to grasp the suture in the blood vessel.” In contrast, Evans discloses features that are not

positioned in or that do not interact within the blood vessel. For example, the sealing mask 22 disclosed by Evans is positioned within the skin layer of the arterial puncture track 10A and does not extend through the opening 10B in the wall 10C of the artery. Therefore, the sealing mask 22 is not positioned within the vessel. Furthermore, the loop distal end 42 of the carrier filament 30 is operable to grasp the extending portions 24A, 24B of suture 24 at a location outside of the puncture 10 and then positioned within the apparatus 20, but is not configured "to be inserted through a wall of the blood vessel (*i.e.*, through the opening 10B in the wall 10C of the artery). The suture 24 does not interact with the loop portion 42 "in the blood vessel," as required by claim 7. Nor does the loop portion 42 "retract the suture through the wall of the blood vessel," as required by claim 7.

There is no suggestion provided by Evans of a vascular closure device that includes all of the features recited in claim 7. Therefore, Evans fails to disclose, suggest, or render obvious every limitation of claim 7 and the claims that depend from it.

Claim 30 stands rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,722,981 to Stevens in view of U.S. Patent No. 5,562,684 to Kammerer.

Claim 30 recites "a suture configured to move with the first needle from the retracted position to the extended position," and "a snare configured to move with the second needle from the retracted position to the extended position." Stevens shows in Figures 7A-C that the suture 121 is advanced through the needle 112 after the needle 112 has been positioned in the vessel. Furthermore, there is no disclosure or suggestion by Stevens of positioning the needle 112 and suture 121 "inside the wire loop of the snare," as required by claim 30. Figures 7A-C of Stevens clearly show advancing the suture 121 alone through the loop 119.

Kammerer fails to remedy the deficiencies of Steven as it relates to claim 30. Kammerer is used only for the disclosure of a suture with a pre-tied knot. Therefore, Stevens, alone or in combination with Kammerer, fails to disclose, suggest, or render obvious every limitation of claim 30.

Claim 31 was rejected under 35 U.S.C. Section 103(a) as being unpatentable over U.S. Patent No. 5,496,332 to Sierra et al., in view of U.S. Patent No. 5,562,684 to Kammerer. Applicant respectfully traverses this rejection.

Claim 31 recites "inserting a snare into the vessel at a first location adjacent to the vessel opening, ...[and] inserting a suture with a needle into the vessel at a second location adjacent to the vessel opening." Sierra discloses only passage of instruments and features through the primary vessel opening/puncture. There is no teaching or suggestion by Sierra of inserting a snare feature or a suture feature into the vessel at locations adjacent to the vessel opening. Kammerer fails to remedy the deficiencies of Sierra as it relates to claim 31. Therefore, Sierra, alone or in combination with Kammerer, fails to disclose, suggest, or render obvious every limitation of claim 31.

Conclusion

For at least the foregoing reasons, Applicant believes that each of the presently pending claims in this application is in immediate condition for allowance. Accordingly, Applicant respectfully requests a favorable action on the merits. If there remain any unresolved issues, Applicant invites the Examiner to telephone the undersigned attorney to expedite the handling of this matter.

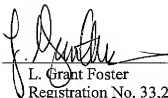
Applicant expressly disclaims all arguments, representations, and/or amendments presented or contained in any other patent or patent application, including any patents or patent applications claimed for priority purposes by the present application or any patents or patent applications that claim priority to this patent application. Moreover, all arguments, representations, and/or amendments presented or contained in the present patent application are only applicable to the present patent application and should not be considered when evaluating any other patent or patent application.

Respectfully submitted,

Date

3 FEBRUARY 2009

By



L. Grant Foster

Registration No. 33,236